REMARKS

Initially, applicants would like to express their appreciation to Examiner Hoang for the courtesies extended to applicants' attorney during a telephone interview on October 22, 2004. The telephone interview involved a discussion of claim 1 and the cited Martin and Dolby references. At the conclusion of the interview, Examiner Hoang agreed in principle that the use of a single signal loss code insert, which is generated in response to detection of a loss of signal and transmitted in place of the data, could overcome the Martin reference.

Claims 13, 14, 23, and 24 are hereby cancelled. After the foregoing amendment, claims 1-12, 15-22, and 25-26 are pending in the application.

Allowable Subject Matter

Applicants appreciate the Examiner's indication that claims 4 and 10 contain allowable subject matter and would be allowable if rewritten in independent form.

Rejections Under 35 U.S.C. § 103(a)

The Examiner has rejected claims 1-3, 5-9, and 11-26 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Number 6,298,038 B1 issued to Martin et al. on October 2, 2001 in view of U.S. Patent Number 6,038,231 issued to Dolby et al. on March 14, 2000.

Applicants respectfully traverse the rejection.

The Office Action states that Martin does not clearly teach that TMux messages or the alarm inhibit signal (AIS) are transmitted in place of the data as in applicants' claimed invention. The Examiner contends that it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the dummy cell insertion from Dolby into the high speed SONET transmission system of Martin. Applicants assert that even if it were proper to combine the cited references, the resulting combination would not anticipate or make obvious applicants' claims.

First, applicants' claim 1 requires a first optical transceiver adapted to a) detect a first loss of signal in at least one of the first Gigabit Ethernet links; b) generate a signal loss code insert in response to detection of the first loss of signal; and c) apply the signal loss code insert to the multiplexer in place of the data packets.

Neither Martin nor Dolby teach or suggest this limitation. Applicants agree that Martin discloses fault detectors that monitor each tributary for hard failures and trigger a line AIS in response to a line failure. However, Martin's AIS is added to the outgoing signal, as stated in column 8, lines 23-26, rather than being transmitted in place of the data packets, as recited in applicant's claim 1 and as acknowledged by the Office Action. Thus, Martin lacks a signal loss code insert that is applied to the multiplexer in place of the data packets.

Dolby discloses a technique for reducing bandwidth in telecommunications links. At the ingress of an ATM network incoming data is packaged into cells and suppressed. The reduced group of cells is transmitted across the ATM network and received at the egress of the ATM network. Dolby discloses a state machine that processes received cells. The state machine inserts a dummy cell into the payload in the case where a cell is missing, as stated in column 10, lines 40-46. Thus, the clear teaching of Dolby is that, at a receiver, dummy cells are inserted after reception of data to fill the space of missing cells, rather than being inserted in place of data and transmitted to communicate the loss of a signal as required in applicants' claim 1. Therefore, Dolby lacks a signal loss code insert that is applied to the multiplexer in place of said data packets.

Moreover, the proposed combination of Martin with Dolby fails to teach applicants' claim 1 because applicants require the use of only **one** signal loss code insert, which is generated in response to detection of a loss of signal and transmitted in place of the data. In contrast, the Examiner proposes to use **two** separate signal loss code inserts, i.e., Martin's AIS, which is triggered in response to a line failure and Dolby's dummy cell, which is inserted into the data payload in the case where a cell is missing.

Since neither Martin nor Dolby teaches applicants' claim 1 limitation of a single signal loss code insert, which is generated in response to detection of a loss of signal and transmitted in place of the data packets, a combination of Martin and Dolby likewise lacks this limitation.

Second, applicants' claim 1 recites, a first plurality of Gigabit Ethernet input/output ports, each port being adapted to be coupled to a first Gigabit Ethernet link carrying data packets.

Neither Martin nor Dolby teach or suggest this limitation. Instead, Martin's arrangement is based on SONET technology and Dolby's arrangement discloses ATM technology. Neither Martin nor Dolby disclose Ethernet technology as recited in applicants' claim 1. Thus, the combination of Martin and Dolby lacks Ethernet input/output ports and Ethernet links as recited in applicants' claim 1.

In view of the foregoing, claim 1 is believed to be allowable over the proposed combination of Martin and Dolby. Since claims 2-6 and 21 depend from allowable claim 1, these claims are also allowable over the proposed combination.

Independent claims 7, 15, and 18 have limitations similar to that in independent claim 1 and are therefore believed to be allowable. The limitations call for transmitting a signal loss code insert/ fault-identifying signal to a receiver in place of the data. See claim 7, lines 11-13, claim 15, lines 9-10, and claim 18, lines 9-10. The Martin and Dolby combination does not teach or suggest these limitations for the above-mentioned reasons. All of the independent claims now also recite that the loss signal code or the fault identifying code be inserted using a Gigabit Etherenet protocol. Since claims 8-12 and 22 depend from claim 7, claims 16, 17 and 25 depend from claim 15, and claims 19, 20 and 26 depend from claim 18, these claims are also believed to be allowable over the proposed combination.

Conclusion

In view of the foregoing amendments and remarks, applicants submit that this application is in condition for allowance, and reconsideration is therefore respectfully requested. If there are any outstanding issues that the Examiner feels may be resolved by way of a telephone conference, the Examiner is invited to contact the undersigned to resolve the issues.

Respectfully submitted,

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